

**Mallari, Patricia**

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**From:** Horrigan, Jeanne (ASRC)  
**Sent:** Monday, February 27, 2006 4:16 PM  
**To:** Mallari, Patricia  
**Subject:** SEARCH RESULTS FOR SERIAL 10/089835

Hi Patricia,

Attached are the search results for the link between diabetes and cyanide/isopropanol and breath tests. I found several items that looked relevant and I underlined the titles of these. However, I recommend that you still review all of the results.

I did not do another inventor search since one was done during the first search. Also, I limited results to those references published before 10/6/2000 (except for patents).



10089835.rtf

I hope the results are useful. Please feel free to contact me if you have any questions or want additional searching on this application.

Best regards,  
Jeanne Horrigan  
ASRC Searcher  
EIC3700  
Phone 23529

# NON-PATENT LITERATURE

(FILE 'HOME' ENTERED AT 10:30:19 ON 27 FEB 2006)  
FILE 'REGISTRY' ENTERED AT 10:30:33 ON 27 FEB 2006

E CYANIDE/CN  
L1 1 S E3  
E ISOPROPANOL/CN  
L2 1 S E3  
FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:34:05 ON 27 FEB 2006  
E DIABETES  
L3 730124 S DIABETES  
L4 79905 S L1 OR L2  
L5 160505 S CYANIDE OR ISOPROPANOL OR ISOPROPYL ALCOHOL  
L6 623 S L3 AND (L4 OR L5)  
L7 343610 S BREATH? OR EXHAL? OR EXPIR?  
L8 12 S L6 AND L7  
L9 12 DUPLICATE REMOVE L8 (0 DUPLICATES REMOVED)  
L10 254150 S L3/TI  
L11 33474 S L5/TI  
L12 13 S L10 AND L11  
L13 13 S L12 NOT L8  
L14 10 DUPLICATE REMOVE L13 (3 DUPLICATES REMOVED)

## L9 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:33109 HCAPLUS  
DOCUMENT NUMBER: 108:33109  
TITLE: Detection of endogenous acetone in normal human  
\*\*\*breath\*\*\*

AUTHOR(S): Phillips, Michael; Greenberg, Joel  
CORPORATE SOURCE: Dep. Med., Chicago Med. Sch., North Chicago, IL,  
60064, USA  
SOURCE: Journal of Chromatography (1987), 422, 235-8  
CODEN: JOCRAM; ISSN: 0021-9673  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A GC-flame-ionization detection assay was highly sensitive and specific for endogenous Me2CO in normal human \*\*\*breath\*\*\*. The mean concn. in normal subjects (23.2 nmol/L) was similar to the mean value of 1.1 .mu.g/L (18.9 nmol/L) obsd. by R. D. Stewart and E. A. Boettner (1964). In practice, the method was highly acceptable to the subjects, with the advantage that samples could be collected at sites remote from the lab. In addn., the use of an internal std. in the collection bag minimized potential errors that might have arisen from leakage of the \*\*\*breath\*\*\* sample prior to the assay. The concn. of Me2CO in the \*\*\*breath\*\*\* is greatly increased in severe ketoacidosis. However, comparatively little attention has been paid to the derangements of acetone metab. which might accompany the milder degrees of ketoacidosis seen in \*\*\*diabetes\*\*\* mellitus, starvation or alc. intoxication. This assay provides a new and potentially useful research tool for the investigation of these conditions.

## L9 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:3110 HCAPLUS  
DOCUMENT NUMBER: 78:3110

**TITLE:** Gas-chromatographic studies of human volatile metabolites in reduced diets and starvation

**AUTHOR(S):** Savina, V. P.; Stepanov, L. N.; Sokolov, N. L.; Nefedov, Yu. G.

**CORPORATE SOURCE:** USSR

**SOURCE:** Kosmicheskaya Biologiya i Meditsina (1972), 6(5), 67-9  
CODEN: KBMEAL; ISSN: 0023-4192

**DOCUMENT TYPE:** Journal

**LANGUAGE:** Russian

**AB** Volatile compds. were studied in the urine, saliva, and \*\*\*expired\*\*\* air from humans starved completely for 20 days and or on restricted diets (600 or 1800 kcal/day). With a restricted diet, the amt. of Me2CO in urine increased 200-fold and with complete starvation 400-fold. With complete starvation, MeCHO in urine increased 16-fold and EtOH 3-fold; other changes in urinary volatiles were not found. With complete starvation, Me2CO in the saliva increased 400-fold, MeCHO 16-fold, MeOH 100-fold, iso-PrOH 50-fold, EtOH 3-fold, and PrOH 5-fold; Me2CO in \*\*\*expired\*\*\* air increased 200-fold and MeEtCO and EtOH 3-5-fold. \*\*\*Expired\*\*\* air from diabetic patients contained 2-3-fold more Me2CO, and from subjects with pulmonary cancer up to 2-fold more NH3 and NH4+ compds. and much less CO2 (<2 mg/m3) and hydrocarbons (<1 mg/m3) than air from healthy humans.

L9 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

**ACCESSION NUMBER:** 1958:31359 HCAPLUS

**DOCUMENT NUMBER:** 52:31359

**ORIGINAL REFERENCE NO.:** 52:5652b-d

**TITLE:** Circulation, respiration, and oxygen saturation of the blood in \*\*\*cyanide\*\*\* poisoning

**AUTHOR(S):** Mercker, H.; Lochner, W.; Gerstenberg, E.

**CORPORATE SOURCE:** Univ. Gottingen, Germany

**SOURCE:** Naunyn-Schmiedebergs Archiv fuer Experimentelle Pathologie und Pharmakologie (1958), 232, 459-69  
CODEN: AEPPAE; ISSN: 0365-2009

**DOCUMENT TYPE:** Journal

**LANGUAGE:** Unavailable

**AB** Dogs were given an infusion of KCN at the rate of 0.08 mg./kg./min. The mean survival time was 28 +/- 1.2 min. (n = 15). The mean arterial blood pressure remained rather const. for a long period of infusion and dropped rapidly as death approached. The O satn. of the arterial blood did not change appreciably. This is explained by the fact that the O consumption is lowered as the pulmonary ventilation decreases. The O satn. of the mixed venous blood and of the coronary sinus blood was increased during the infusion. The arterial lactic acid increased and the arterio-venous difference in lactic acid of the heart muscle was always increased after 6 min. of infusion. The beneficial effect of O \*\*\*breathing\*\*\* is explained by the O dissolved in the plasma, since KCN blocks the cytochrome oxidase.

L9 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

**ACCESSION NUMBER:** 2001:25616 HCAPLUS

**DOCUMENT NUMBER:** 134:83064

**TITLE:** Methods of use for sensor-based fluid detection

**devices**

INVENTOR(S): Lewis, Nathan S.  
PATENT ASSIGNEE(S): California Institute of Technology, USA  
SOURCE: U.S., 48 pp., Cont.-in-part of U.S. 6,010,616.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 7  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6170318	B1	20010109	US 1998-183724	19981030
US 5571401	A	19961105	US 1995-410809	19950327
EP 950895	A2	19991020	EP 1999-202573	19960326
EP 950895	A3	20020102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 5698089	A	19971216	US 1996-689227	19960807
US 6010616	A	20000104	US 1997-986500	19971208
US 5951846	A	19990914	US 1998-6142	19980114
US 6013229	A	20000111	US 1998-95376	19980610
US 5891398	A	19990406	US 1998-154604	19980916
US 6093308	A	20000725	US 1999-258713	19990226
WO 2000026638	A1	20000511	WO 1999-US25544	19991029
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1131616	A1	20010912	EP 1999-956803	19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002529694	T2	20020910	JP 2000-579968	19991029
US 6331244	B1	20011218	US 2000-478680	20000106
JP 2006010703	A2	20060112	JP 2005-222200	20050729
PRIORITY APPLN. INFO.:			US 1995-410809	A1 19950327
			US 1996-689227	A1 19960807
			US 1997-986500	A2 19971208
			EP 1996-910563	A3 19960326
			JP 1996-529590	A3 19960326
			US 1996-696128	A1 19960814
			US 1997-949730	A1 19971014
			US 1998-6142	A1 19980114
			US 1998-183724	A 19981030
			US 1999-258713	A1 19990226
			WO 1999-US25544	W 19991029
AB Methods of use and devices for detecting analyte in fluid are described. A system for detecting an analyte in a fluid is described comprising a substrate having a sensor comprising a first org. material and a second org. material where the sensor has a response to permeation by an analyte. A detector is operatively assocd. with the sensor. Further, a fluid delivery appliance is operatively assocd. with the sensor. The sensor				

device has information storage and processing equipment, which is operably connected with the device. This device compares a response from the detector with a stored ideal response to detect the presence of analyte. An integrated system for detecting an analyte in a fluid is also described where the sensing device, detector, information storage and processing device, and fluid delivery device are incorporated in a substrate. Methods for use for the above system are also described where the first org. material and a second org. material are sensed and the analyte is detected with a detector operatively assocd. with the sensor. The method provides for a device, which delivers fluid to the sensor and measures the response of the sensor with the detector. Further, the response is compared to a stored ideal response for the analyte to det. the presence of the analyte. In different embodiments, the fluid measured may be a gaseous fluid, a liq., or a fluid extd. from a solid. Methods of fluid delivery for each embodiment are accordingly provided. The sensor assembly is used to detect analytes indicative of disease, of exposure to toxic substances, of spoiled food, of air quality, of noxious poisonous vapors, etc. The sensor may be incorporated into bandages.

REFERENCE COUNT: 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

**L14 ANSWER 1 OF 10 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN**

ACCESSION NUMBER: 1992:272901 BIOSIS  
DOCUMENT NUMBER: PREV199242131851; BR42:131851  
**TITLE: THE ROLE OF \*\*\*CYANIDE\*\*\* INGESTION IN TROPICAL MALNUTRITION AND THE \*\*\*DIABETES\*\*\* ASSOCIATED WITH IT.**  
AUTHOR(S): MACMILLAN D E [Reprint author]  
CORPORATE SOURCE: STATE FLA **DIABETES** CENT, UNIV S FLA, TAMPA, FLA 33612, USA  
SOURCE: Int. Congr. Ser. - Excerpta Med., (1991) pp. 955-959.  
RIFKIN, H., J. A. COLWELL AND S. I. TAYLOR (ED.).  
INTERNATIONAL CONGRESS SERIES, 1000. **DIABETES** 1991; 14TH INTERNATIONAL **DIABETES** FEDERATION CONGRESS: WASHINGTON, D.C., USA, JUNE 23-28, 1991. XXIX+1337P. ELSEVIER SCIENCE PUBLISHERS B.V.: AMSTERDAM, NETHERLANDS; (DIST. IN THE USA AND CANADA BY ELSEVIER SCIENCE PUBLISHING CO., INC.: NEW YORK, NEW YORK, USA). ILLUS. MAPS.  
Publisher: Series: International Congress Series.  
CODEN: EXMDA4. ISSN: 0531-5131. ISBN: 0-444-89254-0.  
DOCUMENT TYPE: Book  
Conference; (Meeting)  
FILE SEGMENT: BR  
LANGUAGE: ENGLISH  
ENTRY DATE: Entered STN: 31 May 1992  
Last Updated on STN: 1 Jun 1992

**L14 ANSWER 2 OF 10 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN**

ACCESSION NUMBER: 1986:270644 BIOSIS  
DOCUMENT NUMBER: PREV198631015564; BR31:15564  
**TITLE: HYPERGLYCEMIA AND CHRONIC EXPOSURE TO SUBLETHAL DIETARY \*\*\*CYANIDE\*\*\* DOES REGULAR CASSAVA MANIHOT-ESCULENTA EATING PREDISPOSE TO \*\*\*DIABETES\*\*\* .**  
AUTHOR(S): JACKSON L [Reprint author]  
CORPORATE SOURCE: UNIV CALIF, BERKELEY, CALIF, USA

SOURCE: American Journal of Physical Anthropology, (1986) Vol. 69,  
No. 2, pp. 218.  
Meeting Info.: FIFTY-FIFTH ANNUAL MEETING OF THE AMERICAN  
ASSOCIATION OF PHYSICAL ANTHROPOLOGISTS, ALBUQUERQUE, N.M.,  
USA, APR. 9-12, 1986. AM J PHYS ANTHROPOL.  
CODEN: AJPNA9. ISSN: 0002-9483.

DOCUMENT TYPE: Conference; (Meeting)

FILE SEGMENT: BR

LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 28 Jun 1986  
Last Updated on STN: 28 Jun 1986

File 155:MEDLINE(R) 1951-2006/Feb 27  
(c) format only 2006 Dialog  
File 5:Biosis Previews(R) 1969-2006/Feb W3  
(c) 2006 BIOSIS  
File 73:EMBASE 1974-2006/Feb 27  
(c) 2006 Elsevier Science B.V.  
File 94:JICST-EPlus 1985-2006/Dec W1  
(c) 2006 Japan Science and Tech Corp(JST)  
File 144:Pascal 1973-2006/Feb W1  
(c) 2006 INIST/CNRS

Set	Items	Description
S1	85954	CYANIDE OR CYANIDES OR CARBON()NITRIDE OR HYDROCYANIC()ACID OR ISOCYANIDE OR NITRILE()ANION? ? OR CYANAMIDE OR FERROCYAN- IDE
S2	11869	RN=57-12-5
S3	27113	ISOPROPANOL OR ISOPROPYL()ALCOHOL OR 1() (METHYLETHANOL OR - METHYL()ETHANOL OR METHYLETHYL()ALCOHOL OR METHYL()ETHYL()ALC- OHOL) OR 2() (PROPANOL OR HYDROXYPROPANE OR PROPYL()ALCOHOL)
S4	3965	ALCOJEL OR ALCOSOLVE OR AUTOSEPT OR AVANTIN OR AVANTINE OR COMBI()SCHUTZ OR DIMETHYLCARBINOL OR DIMETHYL()CARBINOL OR HA- RTOSOL OR IMSOL OR ISO() (PROPANOL OR PROPYL()ALCOHOL) OR ISOP- ROPYL()ALCOHOL OR ISOHOL OR LUTOSOL OR PETROHOL OR PROPOL OR - SEC() (PROPANO
S5	5905	(CH3)2CH2O OR RN=67-63-0
S6	875846	DIABET???
S7	351076	BREATH? OR EXHALE? ? OR EXHALING OR EXHALATION OR EXPIR?
S8	5	S1:S5 AND S6 AND S7
S9	5	RD (unique items)
S10	40293	DS
S11	241	S1:S5(S)S6
S12	232	S1:S5/TI,DE AND S6/TI,DE

9/7/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2006 Dialog. All rts. reserv.  
11185496 PMID: 7595310

**Biotransformation of acetone to isopropanol observed in a motorist  
involved in a sobriety check.**

Jones A W; Andersson L

Department of **Alcohol** Toxicology, University Hospital, Linkoping, Sweden.

Journal of forensic sciences (UNITED STATES) Jul 1995, 40 (4) p686-7

, ISSN 0022-1198 Journal Code: 0375370

Publishing Model Print

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

We report the identification of acetone (0.45 mg/mL) and **isopropanol** (0.17 mg/mL) but without the presence of **ethanol** in a blood sample from a man suspected of driving under the influence of **alcohol**. A preliminary **breath** screening test with an electrochemical instrument (Alcolmeter S-L2) was positive and an evidential **breath** -test with a dual wavelength infrared analyzer (Intoxilyzer 5000), recognized the presence of an interferant in the subject's **breath**. The man admitted drinking moderate amounts of **alcohol** (vodka) the previous evening and was being treated by his doctor for **hyperglycemia** by special dietary control. This case scenario

provides a good example of severe metabolic ketoacidosis in an ostensibly healthy man driving on the highway. Biotransformation of the abnormally high concentration of blood-acetone to **isopropanol** occurs through the **alcohol** dehydrogenase pathway.

Record Date Created: 19951207

Record Date Completed: 19951207

9/9/3 (Item 1 from file: 73)

DIALOG(R) File 73:EMBASE

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05006737 EMBASE No: 1992146953

**Hypotensive anaesthesia**

Simpson P.J.

Department of Anaesthetics, Frenchay Hospital, Bristol BS16 1LE United Kingdom

Current Anaesthesia and Critical Care ( CURR. ANAESTH. CRIT. CARE ) ( United Kingdom) 1992, 3/2 (90-97)

CODEN: CCCAE ISSN: 0953-7112

DOCUMENT TYPE: Journal; Short Survey

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

BRAND NAME/MANUFACTURER NAME: arfonad; ansolysen; alloferin

**DRUG DESCRIPTORS:**

alcuronium--pharmacology--pd; antihypertensive agent; atenolol  
--pharmacology--pd; chlorpromazine--pharmacology--pd; droperidol  
--pharmacology--pd; enflurane--pharmacology--pd; glyceryl trinitrate  
--pharmacology--pd; glyceryl trinitrate--pharmacokinetics--pk; halothane  
--pharmacology--pd; **isoflurane**--pharmacology--pd; labetalol--pharmacology  
--pd; nitroprusside sodium--pharmacology--pd; nitroprusside sodium  
--pharmacokinetics--pk; nitroprusside sodium--drug dose--do; nitroprusside  
sodium--adverse drug reaction--ae; oxprenolol--pharmacology--pd;  
pentolonium tartrate--pharmacology--pd; pentolonium tartrate--adverse drug  
reaction--ae; pentolonium tartrate--drug dose--do; pentolonium tartrate  
--drug comparison--cm; phenoxybenzamine--pharmacology--pd; phentolamine  
--pharmacology--pd; practolol--pharmacology--pd; propranolol--pharmacology  
--pd; propranolol--drug dose--do; trimetaphan--drug comparison--cm;  
trimetaphan--drug administration--ad; trimetaphan--adverse drug reaction  
--ae; trimetaphan--pharmacology--pd; trimetaphan--pharmacokinetics--pk;  
trimetaphan--drug dose--do; tubocurarine chloride--pharmacology--pd

**MEDICAL DESCRIPTORS:**

\*anesthesia; \*hypotension--etiology--et  
antihypertensive activity; arterial pressure; blood pressure monitoring;  
body posture; **cyanide** poisoning--side effect--si; **diabetes** mellitus;  
drug contraindication; epidural anesthesia; general anesthesia; human;  
hypertension; intermittent positive pressure ventilation; intravenous drug  
administration; ischemic heart disease; lung gas exchange; mydriasis--side  
effect--si; oral drug administration; patient monitoring; positive end  
**expiratory** pressure; respiratory tract disease; short survey; spinal  
anesthesia; tachycardia--side effect--si

CAS REGISTRY NO.: 15180-03-7, 23214-96-2 (alcuronium); 29122-68-7 (atenolol  
); 50-53-3, 69-09-0 (chlorpromazine); 548-73-2 (droperidol); 13838-16-9  
(enflurane); 55-63-0 (glyceryl trinitrate); 151-67-7, 66524-48-9 (  
halothane); 26675-46-7 (**isoflurane**); 32780-64-6, 36894-69-6 (labetalol)  
; 14402-89-2, 15078-28-1 (nitroprusside sodium); 22972-97-0, 6452-71-7,  
6452-73-9 (oxprenolol); 144-44-5, 52-62-0 (pentolonium tartrate);  
59-96-1, 63-92-3 (phenoxybenzamine); 50-60-2, 73-05-2 (phentolamine);



6673-35-4 (practolol); 13013-17-7, 318-98-9, 3506-09-0, 4199-09-1,  
525-66-6 (propranolol); 68-91-7, 7187-66-8 (trimetaphan); 57-94-3,  
57-95-4, 8006-51-7 (tubocurarine chloride)

SECTION HEADINGS:

024 Anesthesiology  
030 Clinical and Experimental Pharmacology  
037 Drug Literature Index  
038 Adverse Reaction Titles

**9/9/4 (Item 2 from file: 73)**

DIALOG(R)File 73:EMBASE

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02268311 EMBASE No: 1982061472

**Pathogenesis of alloxan diabetes (Pi-pH hypothesis): Discrimination  
between effect of alloxan on mitochondrial uptake and release of Pi**

Boquist L.; Nelson L.

Inst. Pathol., Univ. Umea S-901 87 Umea Sweden

Acta Endocrinologica, Supplement ( ACTA ENDOCRINOL. SUPPL. ) (Denmark)

1981, 98/Suppl.245 (14)

CODEN: ACEDA

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH

DRUG DESCRIPTORS:

\*carbonyl **cyanide** 4 (trifluoromethoxy)phenylhydrazone; \*acetic acid; \*  
alloxan; \*cysteine; \*methylmercury; \*oligomycin; \*phosphate; \*potassium; \*  
rotenone; \*succinic acid; \*thiol group

MEDICAL DESCRIPTORS:

\*alloxan **diabetes** mellitus; \*liver; \*mitochondrion; \* **breathing**  
mouse; pathogenesis; pH; etiology; abstract report; in vitro study; animal  
experiment; endocrine system

MEDICAL TERMS (UNCONTROLLED): ammonium phosphate

CAS REGISTRY NO.: 370-86-5 (carbonyl **cyanide** 4

(trifluoromethoxy)phenylhydrazone); 127-08-2, 127-09-3, 64-19-7,  
71-50-1 (acetic acid); 3237-50-1, 50-71-5 (alloxan); 4371-52-2, 52-89-1  
, 52-90-4 (cysteine); 486-67-9, 492-18-2 (methylmercury); 1404-19-9 (oligomycin); 14066-19-4, 14265-44-2 (phosphate); 7440-09-7 (potassium); 83-79-4 (rotenone); 110-15-6 (succinic acid)

SECTION HEADINGS:

037 Drug Literature Index

**9/9/5 (Item 1 from file: 94)**

DIALOG(R)File 94:JICST-EPlus

(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

00066385 JICST ACCESSION NUMBER: 85A0189455 FILE SEGMENT: JICST-E

**Studies on isopropanol metabolism and poisoning.**

IDOTA SACHIKO (1)

(1) Nihon Univ., School of Medicine

Nichidai Igaku Zasshi(Journal of Nihon University Medical Association),

1985, VOL.44,NO.1, PAGE.39-47, FIG.12, TBL.3, REF.20

JOURNAL NUMBER: F0911AAO ISSN NO: 0029-0424 CODEN: NICHA

UNIVERSAL DECIMAL CLASSIFICATION: 615.917 616.39-099

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

DESCRIPTORS: rat; drug poisoning; **alcohol** dehydrogenase; tissue concentration; human(primates); liver; blood concentration; starvation; **expiratory** excretion; **diabetes** mellitus; oral administration; aliphatic **alcohol**; aliphatic ketone; deoxysugar; nitrogen heterocyclic compound

BROADER DESCRIPTORS: Myomorpha; Rodentia; Mammalia; Vertebrata; animal; poisoning(disease); disease; **alcohol** oxidoreductase; oxidoreductase; enzyme; concentration(ratio); degree; bile duct system; digestive organ; malnutrition; nutrition **disorder**; **disorder**/trouble/obstacle; metabolic disease; excretion; administration route; administration(biology); **alcohol**; hydroxy compound; ketone; carbonyl compound; carbohydrate; heterocyclic compound

CLASSIFICATION CODE(S): GZ02030Y; GD06010Q

File 387:The Denver Post 1994-2006/Feb 24  
 (c) 2006 Denver Post  
 File 471:New York Times Fulltext 1980-2006/Feb 27  
 (c) 2006 The New York Times  
 File 492:Arizona Repub/Phoenix Gaz 19862002/Jan 06  
 (c) 2002 Phoenix Newspapers  
 File 494:St LouisPost-Dispatch 1988-2006/Feb 26  
 (c) 2006 St Louis Post-Dispatch  
 File 631:Boston Globe 1980-2006/Feb 24  
 (c) 2006 Boston Globe  
 File 633:Phil.Inquirer 1983-2006/Feb 23  
 (c) 2006 Philadelphia Newspapers Inc  
 File 638:Newsday/New York Newsday 1987-2006/Feb 25  
 (c) 2006 Newsday Inc.  
 File 640:San Francisco Chronicle 1988-2006/Feb 26  
 (c) 2006 Chronicle Publ. Co.  
 File 641:Rocky Mountain News Jun 1989-2006/Feb 27  
 (c) 2006 Scripps Howard News  
 File 702:Miami Herald 1983-2006/Feb 24  
 (c) 2006 The Miami Herald Publishing Co.  
 File 703:USA Today 1989-2006/Feb 24  
 (c) 2006 USA Today  
 File 704:(Portland)The Oregonian 1989-2006/Feb 26  
 (c) 2006 The Oregonian  
 File 713:Atlanta J/Const. 1989-2006/Feb 26  
 (c) 2006 Atlanta Newspapers  
 File 714:(Baltimore) The Sun 1990-2006/Feb 27  
 (c) 2006 Baltimore Sun  
 File 715:Christian Sci.Mon. 1989-2006/Feb 27  
 (c) 2006 Christian Science Monitor  
 File 725:(Cleveland)Plain Dealer Aug 1991-2006/Feb 26  
 (c) 2006 The Plain Dealer  
 File 735:St. Petersburg Times 1989- 2006/Feb 26  
 (c) 2006 St. Petersburg Times  
 File 476:Financial Times Fulltext 1982-2006/Feb 28  
 (c) 2006 Financial Times Ltd  
 File 477:Irish Times 1999-2006/Feb 27  
 (c) 2006 Irish Times  
 File 710:Times/Sun.Times(London) Jun 1988-2006/Feb 27  
 (c) 2006 Times Newspapers  
 File 711:Independent(London) Sep 1988-2006/Feb 27  
 (c) 2006 Newspaper Publ. PLC  
 File 756:Daily/Sunday Telegraph 2000-2006/Feb 27  
 (c) 2006 Telegraph Group  
 File 757:Mirror Publications/Independent Newspapers 2000-2006/Feb 27  
 (c) 2006

Set	Items	Description
S1	10407	CYANIDE OR CYANIDES OR CARBON()NITRIDE OR HYDROCYANIC()ACID OR ISOCYANIDE OR NITRILE()ANION? ? OR CYANAMIDE OR FERROCYN- IDE
S2	0	RN=57-12-5
S3	337	ISOPROPANOL OR ISOPROPYL()ALCOHOL OR 1() (METHYLETHANOL OR - METHYL()ETHANOL OR METHYLETHYL()ALCOHOL OR METHYL()ETHYL()ALC- OHOL) OR 2() (PROPANOL OR HYDROXYPROPANE OR PROPYL()ALCOHOL)
S4	295	ALCOJEL OR ALCOSOLVE OR AUTOSEPT OR AVANTIN OR AVANTINE OR COMBI()SCHUTZ OR DIMETHYLCARBINOL OR DIMETHYL()CARBINOL OR HA-

RTOSOL OR IMSOL OR ISO() (PROPANOL OR PROPYL()ALCOHOL) OR ISOPROPYL()ALCOHOL OR ISOHOL OR LUTOSOL OR PETROHOL OR PROPOL OR -  
 SEC() (PROPANO  
 S5 0 (CH3)2CH2O OR RN=67-63-0  
 S6 98637 DIABET???  
 S7 818807 BREATH? OR EXHALE? ? OR EXHALING OR EXHALATION OR EXPIR?  
 S8 11 S1:S4 AND S6 AND S7  
**S9 10 RD (unique items) [not relevant]**

File 149:TGG Health&Wellness DB(SM) 1976-2006/Feb W2  
 (c) 2006 The Gale Group  
 File 135:NewsRx Weekly Reports 1995-2006/Feb W3  
 (c) 2006 NewsRx  
 File 129:PHIND(Archival) 1980-2006/Feb W3  
 (c) 2006 T&F Informa UK Ltd  
 File 148:Gale Group Trade & Industry DB 1976-2006/Feb 24  
 (c)2006 The Gale Group  
 File 47:Gale Group Magazine DB(TM) 1959-2006/Feb 24  
 (c) 2006 The Gale group  
 File 621:Gale Group New Prod.Annou.(R) 1985-2006/Feb 24  
 (c) 2006 The Gale Group  
 File 16:Gale Group PROMT(R) 1990-2006/Feb 27  
 (c) 2006 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
 (c) 1999 The Gale Group  
 File 484:Periodical Abs Plustext 1986-2006/Feb W3  
 (c) 2006 ProQuest  
 File 141:Readers Guide 1983-2004/Dec  
 (c) 2005 The HW Wilson Co  
 File 369:New Scientist 1994-2006/Aug W4  
 (c) 2006 Reed Business Information Ltd.  
 File 370:Science 1996-1999/Jul W3  
 (c) 1999 AAAS  
 File 636:Gale Group Newsletter DB(TM) 1987-2006/Feb 24  
 (c) 2006 The Gale Group  
 File 635:Business Dateline(R) 1985-2006/Feb 25  
 (c) 2006 ProQuest Info&Learning

Set	Items	Description
S1	16601	CYANIDE OR CYANIDES OR CARBON()NITRIDE OR HYDROCYANIC()ACID OR ISOCYANIDE OR NITRILE()ANION? ? OR CYANAMIDE OR FERROCYN- IDE
S2	0	RN=57-12-5
S3	5252	ISOPROPANOL OR ISOPROPYL()ALCOHOL OR 1() (METHYLETHANOL OR - METHYL()ETHANOL OR METHYLETHYL()ALCOHOL OR METHYL()ETHYL()ALC- OHOL) OR 2() (PROPANOL OR HYDROXYPROPANE OR PROPYL()ALCOHOL)
S4	3354	ALCOJEL OR ALCOSOLVE OR AUTOSEPT OR AVANTIN OR AVANTINE OR COMBI()SCHUTZ OR DIMETHYLCARBINOL OR DIMETHYL()CARBINOL OR HA- RTOSOL OR IMSOL OR ISO() (PROPANOL OR PROPYL()ALCOHOL) OR ISOP- ROPYL()ALCOHOL OR ISOHOL OR LUTOSOL OR PETROHOL OR PROPOL OR - SEC() (PROPANO
S5	0	(CH3)2CH2O OR RN=67-63-0
S6	305083	DIABET???
S7	881219	BREATH? OR EXHALE? ? OR EXHALING OR EXHALATION OR EXPIR?
S8	6	S1:S4(S)S6(S)S7
<b>S9</b>	<b>4</b>	<b>RD (unique items)</b>
S10	117	S1:S4 AND S6 AND S7

S11 102753 S6/TI OR S7/TI  
S12 10 S10 AND S11  
S13 10 S12 NOT S8  
**S14 6 RD (unique items) [not relevant]**  
S15 58 S6/TI AND S7/TI  
S16 0 S15 AND S1:S4

**9/3,K/2 (Item 2 from file: 149)**

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

(c) 2006 The Gale Group. All rts. reserv.

01947513 SUPPLIER NUMBER: 66123992 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Toxic Alcohol Poisoning: When to Suspect-Keys to Diagnosis.**

ERICKSON, TIMOTHY

Consultant, 40, 10, 1845

Sept,

2000

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0010-7069

LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 3897 LINE COUNT: 00337

... not cause acidosis, but it does increase the osmolal gap (Table 2).

Laboratory clues. Suspect **isopropanol** ingestion in any comatose patient who has an acetone-like odor of the **breath**, ketones on dipstick urinalysis, and in whom **diabetic** ketoacidosis has been ruled out Because **isopropanol is catabolized to acetone**, the serum level of acetone may be used to quantify the amount of **isopropanol** ingested.

DIETHYLENE GLYCOL

This highly toxic organic solvent is used in antifreeze, brake fluid, window...or acetone. Coma usually develops when blood levels of **isopropanol** exceed 100 mg/dL.

\* Suspect **isopropanol** ingestion in any comatose patient who has an acetone-like odor of the **breath**, ketones on dipstick urinalysis, and in whom **diabetic** ketoacidosis has been ruled out.

**9/3,K/3 (Item 3 from file: 149)**

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

(c) 2006 The Gale Group. All rts. reserv.

01149207 SUPPLIER NUMBER: 06751975 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Alcoholic emergencies. (includes related articles) (Emergency Handbook)**

Lerner, William D.; Marx, John A.; Mathews, James J., IV; Lenk, Eric

Patient Care, v22, n10, p112(13)

May 30,

1988

PUBLICATION FORMAT: Magazine/Journal ISSN: 0031-305X LANGUAGE: English

RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 5469 LINE COUNT: 00571

... weakly positive in **alcoholic** ketoacidosis. Acetone in the urine is consistent with **alcoholic** ketoacidosis or **isopropyl alcohol** intoxication, but the **anion** gap is increased only in ketoacidosis. Elevated urinary glucose and ketones suggest **diabetic** ketoacidosis; **alcoholic** ketoacidosis is not associated with marked hyperglycemia.

Treatment consists of volume replacement with...

## FOREIGN AND INTERNATIONAL PATENTS

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200613

(c) 2006 Thomson Derwent

File 347:JAPIO Nov 1976-2005/Oct(Updated 060203)

(c) 2006 JPO & JAPIO

Set Items Description

S1 23556 CYANIDE OR CYANIDES OR CARBON()NITRIDE OR HYDROCYANIC()ACID  
OR ISOCYANIDE OR NITRILE()ANION? ? OR CYANAMIDE OR FERROCYN-  
IDE

S2 0 RN=57-12-5

S3 32616 ISOPROPANOL OR ISOPROPYL()ALCOHOL OR 1() (METHYLETHANOL OR -  
METHYL()ETHANOL OR METHYLETHYL()ALCOHOL OR METHYL()ETHYL()ALC-  
OHOL) OR 2() (PROPANOL OR HYDROXYPROPANE OR PROPYL()ALCOHOL)

S4 28435 ALCOJEL OR ALCOSOLVE OR AUTOSEPT OR AVANTIN OR AVANTINE OR  
COMBI()SCHUTZ OR DIMETHYLCARBINOL OR DIMETHYL()CARBINOL OR HA-  
RTOSOL OR IMSOL OR ISO() (PROPANOL OR PROPYL()ALCOHOL) OR ISOP-  
ROPYL()ALCOHOL OR ISOHOL OR LUTOSOL OR PETROHOL OR PROPOL OR -  
SEC() (PROPANO

S5 0 (CH3)2CH2O OR RN=67-63-0

S6 39419 DIABET???

S7 37294 BREATH? OR EXHALE? ? OR EXHALING OR EXHALATION OR EXPIR?

S8 4 S1:S4 AND S6 AND S7

8/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

015470456

WPI Acc No: 2003-532602/200350

Related WPI Acc No: 2003-441447

XRAM Acc No: C03-143818

**Acetone-specific enzyme system, for detecting acetone in biological or  
environmental sample, for disease detection, includes enzyme that targets  
acetone as substrate, coupled to detectable signal mediator**

Patent Assignee: DOW GLOBAL TECHNOLOGIES INC (DOWC ); ALLEN J R (ALLE-I);  
CRANLEY P E (CRAN-I); DANOWSKI K L (DANO-I); MCINTYRE J A (MCIN-I);  
MILLER T E (MILL-I); ROSNER B M (ROSN-I); STRICKLAND A D (STRI-I);  
SUBRAMANIAN V (SUBR-I); SUN L (SUNL-I)

Inventor: ALLEN J R; CRANLEY P E; DANOWSKI K L; MCINTYRE J A; MILLER T E;  
ROSNER B M; STRICKLAND A D; SUBRAMANIAN V; SUN L

Number of Countries: 098 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200339483	A2	20030515	WO 2002US36028	A	20021108	200350 B
AU 2002348199	A1	20030519	AU 2002348199	A	20021108	200464
EP 1523551	A2	20050420	EP 2002784423	A	20021108	200527
			WO 2002US36028	A	20021108	
US 20050084921	A1	20050421	US 2001332349	P	20011109	200531
			WO 2002US36028	A	20021108	
			US 2004494923	A	20040505	
MX 2004004441	A1	20041101	WO 2002US36028	A	20021108	200558
			MX 20044441	A	20040510	

Priority Applications (No Type Date): US 2001332349 P 20011109; US  
2004494923 A 20040505

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200339483 A2 E 181 A61K-000/00  
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS  
JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH  
PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ YU ZA ZM ZW  
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW  
AU 2002348199 A1 A61K-000/00 Based on patent WO 200339483  
EP 1523551 A2 E C12N-009/02 Based on patent WO 200339483  
Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR  
US 20050084921 A1 C12Q-001/26 Provisional application US 2001332349  
MX 2004004441 A1 A61K-000/00000 Based on patent WO 200339483

Abstract (Basic):

... PTA-4779), having NAD<sup>+</sup>-dependent S-ADH activity, having the  
ability to reduce acetone to **isopropanol**, and having specific  
activity for ketones and secondary **alcohols**, the protein having...  
...a) for the oxidation of **isopropanol** to acetone, a pH optimum of 7.8,  
and having, for the oxidation of **alcohols**...  
...b) for the reduction of acetone to **isopropanol**, a pH optimum of 6.2,  
an apparent Km of 144+/-18 micro-M, an...2-10 ppm. (II) is also useful  
for monitoring a subject's medical condition, especially **diabetes** or  
weight loss (all claimed...  
...is particularly suitable for detecting acetone in environmental or  
biological samples, for e.g. mammalian **breath** samples. The enzyme  
systems are useful in in-home device for determination of acetone  
levels in human biological samples, such as **breath**, saliva or urine,  
for monitoring subject wellness and/or, for monitoring subject  
compliance with weight...  
...II) are useful for monitoring ketogenic diet-utilizing subjects for  
seizure control, for detecting gestational **diabetes**, for aiding in  
type I **diabetes** monitoring or type II **diabetes** management, for  
monitoring client progress in weight loss and eating **disorders**  
counseling and in high...  
...for assisting in livestock management. (II) enables subjects suffering  
from acetone-related conditions, such as **diabetes**, to monitor weight  
loss and/or the onset of ketoacidosis, as well as to non...

8/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.  
015268714 \*\*Image available\*\*  
WPI Acc No: 2003-329643/200331  
XRAM Acc No: C03-085676  
XRPX Acc No: N03-263758

**Remote physiological parameter monitoring method e.g. for monitoring blood  
pressure, involves attaching biointerface head comprising sensor to patient's body  
and transmitting data from biointerface head to control module**

Patent Assignee: PHILOMETRON INC (PHIL-N); DRINAN D (DRIN-I); EDMAN C F  
(EDMA-I); MERZ D (MERZ-I)

Inventor: DRINAN D; EDMAN C; MERZ D; EDMAN C F

Number of Countries: 100 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030004403	A1	20030102	US 2001301897	P	20010629	200331 B

			US 200132765	A	20011029	
WO 200349592	A2	20030619	WO 2002US20006	A	20020621	200341
TW 552126	A	20030911	TW 2002114326	A	20020628	200417
AU 2002365064	A1	20030623	AU 2002365064	A	20020621	200420
EP 1411826	A2	20040428	EP 2002802911	A	20020621	200429
			WO 2002US20006	A	20020621	
JP 2005511184	W	20050428	WO 2002US20006	A	20020621	200530
			JP 2003550645	A	20020621	

Priority Applications (No Type Date): US 2001301897 P 20010629; US 200132765 A 20011029

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030004403	A1		29	A61B-005/00	Provisional application US 2001301897
WO 200349592	A2	E		A61B-000/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
TW 552126	A			A61B-005/00	
AU 2002365064	A1			A61B-005/00	Based on patent WO 200349592
EP 1411826	A2	E		A61B-005/00	Based on patent WO 200349592
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2005511184	W		39	A61B-005/00	Based on patent WO 200349592

Abstract (Basic):

... temperature of premature infant or infant, for measuring glucose, fructosime, hemoglobin 1 ac level in **diabetic** patient, for monitoring drugs such as cocaine, heroin, marijuana, amphetamines and other illicit compounds and...

...content within saliva for measuring dietary/nutritional status e.g.. catabolic dietary deficiency, for checking **breath** acceptability in social settings, for measuring oxygen consumption and consumption of gases such as **cyanide** , Lewisite or specific toxin, for augmenting hearing and in veterinary application for monitoring general health...

8/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.  
 015251680  
 WPI Acc No: 2003-312606/200330  
 XRAM Acc No: C03-081793

**Composition useful for the treatment of e.g. diabetes , comprises particles comprised of a glucagon-like peptide-1 (GLP-1) compound complexed with a basic polypeptide**

Patent Assignee: LILLY & CO ELI (ELIL ); DEFELIPPIS M R (DEFE-I); HAVEL H A (HAVE-I); MACE K F (MACE-I); NG K (NGKK-I); SARIN V K (SARI-I)  
 Inventor: DEFELIPPIS M R; HAVEL H A; MACE K F; NG K; SARIN V K  
 Number of Countries: 101 Number of Patents: 005  
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200298348	A2	20021212	WO 2002US15137	A	20020521	200330 B
AU 2002308706	A1	20021216	AU 2002308706	A	20020521	200452



US 20050043228 A1 20050224 US 2001295282 P 20010601 200515  
WO 2002US15137 A 20020521  
US 2003477034 A 20031106  
JP 2005506956 W 20050310 WO 2002US15137 A 20020521 200518  
JP 2003501390 A 20020521  
EP 1542712 A2 20050622 EP 2002776560 A 20020521 200541  
WO 2002US15137 A 20020521

Priority Applications (No Type Date): US 2001295282 P 20010601; US  
2003477034 A 20031106

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200298348 A2 E 45 A61K-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU  
ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 2002308706 A1 A61K-000/00 Based on patent WO 200298348

US 20050043228 A1 A61K-038/26 Provisional application US 2001295282

JP 2005506956 W 128 A61K-038/26 Based on patent WO 200298348

EP 1542712 A2 E A61K-038/16 Based on patent WO 200298348

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI  
LU MC NL PT SE TR

Abstract (Basic):

... mixing the GLP-1 solution with the basic polypeptide solution.

The **alcohol** is **ethanol**, **propanol**, **isopropanol** and/or **methanol**  
(preferably **ethanol**...

...In the preparation of a medicament for the treatment of **diabetes**,  
hyperglycemia, obesity, irritable bowel syndrome, myocardial infarction  
and stroke in a mammal (claimed...

Extension Abstract:

... The aerosol concentration was 200 micrograms/kg. The inhaled  
dose was calculated by determining the **breathing** volume of individual  
monkeys and multiplying that by the aerosolization concentration. The  
deposited dose was...

**8/3,K/4 (Item 4 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

013638685 \*\*Image available\*\*

WPI Acc No: 2001-122893/200113

XRAM Acc No: C01-035617

**New dihydropyridine carboxylic acid derivatives are N-type calcium  
channel inhibitors for treating e.g. cerebral ischemic disorders,  
neurodegenerative disorders and pain**

Patent Assignee: AJINOMOTO CO INC (AJIN )

Inventor: HAGIHARA M; KAJIGAYA Y; KITO M; KOGANEI H; MASUZAWA Y; MATSUEDA H  
; NAKANISHI C; NIWA S; OHNO S; ONO Y; TAKAHARA A; TAKEDA T; YAMAMOTO T

Number of Countries: 095 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200078719	A1	20001228	WO 2000JP4105	A	20000622	200113 B

AU 200055682	A	20010109	AU 200055682	A	20000622	200122
EP 1191021	A1	20020327	EP 2000940810	A	20000622	200229
			WO 2000JP4105	A	20000622	
US 20020147222	A1	20021010	WO 2000JP4105	A	20000622	200269
			US 200122874	A	20011220	
JP 2001504886	X	20030114	WO 2000JP4105	A	20000622	200316
			JP 2001504886	A	20000622	

Priority Applications (No Type Date): JP 99177491 A 19990623

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200078719	A1	J	152	C07D-211/90	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
 CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
 KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT  
 RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
 IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200055682	A		C07D-211/90	Based on patent WO 200078719
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EP 1191021	A1	E	C07D-211/90	Based on patent WO 200078719
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
 LI LT LU LV MC MK NL PT RO SE SI

US 20020147222	A1		C07D-409/02	Cont of application WO 2000JP4105
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JP 2001504886	X		C07D-211/90	Based on patent WO 200078719
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Abstract (Basic):

... damage (e.g. due to head trauma), pain (e.g. pain and numbness  
 due to **diabetic** occlusive vasculitis, post-operative pain, migraine  
 or internal organ **disorders**), bronchial asthma, stress related  
**disorders** (such as irritable colitis and unstable angina), **breathing**  
**disorders** and **ethanol** addiction...

Extension Abstract:

... mg), 3-aminocrotonic acid 2-cyano**ethyl** (389 mg) and  
 3-chlorobenzoaldehyde (0.285 ml) in **2 - propanol** (20 ml) were  
 refluxed at 80degreesC for 2 nights and the mixture was worked up...

File 349:PCT FULLTEXT 1979-2006/UB=20060223,UT=20060216  
(c) 2006 WIPO/Univentio  
File 324:German Patents Fulltext 1967-200552  
(c) 2006 Univentio  
File 348:EUROPEAN PATENTS 1978-2006/Feb W03  
(c) 2006 European Patent Office

Set	Items	Description
S1	34469	CYANIDE OR CYANIDES OR CARBON()NITRIDE OR HYDROCYANIC()ACID OR ISOCYANIDE OR NITRILE()ANION? ? OR CYANAMIDE OR FERROCYAN- IDE
S2	0	RN=57-12-5
S3	121115	ISOPROPANOL OR ISOPROPYL()ALCOHOL
S4	1	ALCOJEL OR ALCOSOLVE OR AUTOSEPT OR AVANTIN OR AVANTINE OR COMBI()SCHUTZ
S5	232	DIMETHYLCARBINOL OR DIMETHYL()CARBINOL
S6	7	HARTOSOL OR IMSOL
S7	130175	ISO() (PROPANOL OR PROPYL()ALCOHOL) OR ISOPROPYL()ALCOHOL
S8	277	ISOHOL OR LUTOSOL OR PETROHOL OR PROPOL
S9	52	SEC() (PROPANOL OR PROPYL()ALCOHOL) OR TAKINEOCOL OR TOKUSO- ( )IPA OR VIRAHOL
S10	55328	DIABET???
S11	393187	BREATH? OR EXHALE? ? OR EXHALING OR EXHALATION OR EXPIR?
S12	22890	METHYLETHANOL OR METHYL()ETHANOL
S13	525	METHYLETHYL()ALCOHOL OR METHYL()ETHYL()ALCOHOL
S14	179110	PROPANOL OR HYDROXYPROPANE OR PROPYL()ALCOHOL
S15	209208	S1 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S12 OR S13 OR S14
<b>S16</b>	<b>4</b>	<b>S15 (50N) S10 (50N) S11</b>
S17	12	S10(S)S11(S)S15
<b>S18</b>	<b>8</b>	<b>S17 NOT S16 [not relevant]</b>
S19	12	S15(100N)S10(100N)S11
<b>S20</b>	<b>6</b>	<b>S19 NOT S16:S17</b>
S21	0	S7/TI AND S15(50N)S10
S22	2	S11/TI AND S15(50N)S10
S23	0	S22 NOT (S16:S17 OR S19)

**16/3,AB,K/1 (Item 1 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.  
01009846

**AN ENZYME-BASED SYSTEM AND SENSOR FOR MEASURING ACETONE**  
**SYSTEME A BASE D'ENZYMES ET CAPTEUR SERVANT A DETECTER L'ACETONE**

Patent Applicant/Assignee:

DOW GLOBAL TECHNOLOGIES INC, Washington Street, 1790 Building, Midland,  
MI 48674, US, US (Residence), US (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

CRANLEY Paul E, 56 Yaupon Court, Lake Jackson, TX 77566, US, US  
(Residence), US (Nationality), (Designated only for: US)  
ALLEN Jeffrey R, 14702 Fairtree Terrace, Poway, CA 92064, US, US  
(Residence), US (Nationality), (Designated only for: US)  
DANOWSKI Kristine L, 122 Vail Street, Midland, MI 48642, US, US  
(Residence), US (Nationality), (Designated only for: US)  
MCINTYRE James A, 2115 Burlington Court, Midland, MI 48642, US, US  
(Residence), CA (Nationality), (Designated only for: US)  
MILLER Theodore E Jr, 5902 Woopark, Midland, MI 48640, US, US (Residence)

, US (Nationality), (Designated only for: US)  
ROSNER Bettina M, 8870 Villa La Jolla Drive, Apartment 310, La Jolla, CA  
92037, US, US (Residence), US (Nationality), (Designated only for: US)  
STRICKLAND Alan D, 115 Hickory, Lake Jackson, TX 77566, US, US  
(Residence), US (Nationality), (Designated only for: US)  
SUBRAMANIAN Venkiteswaran, 3980 Corte Mar De Hierba, San Diego, CA 92130,  
US, US (Residence), US (Nationality), (Designated only for: US)  
SUN Larry, 71 Royal Crescent, Sarnia, Ontario N7S 4Z4, CA, CA (Residence)  
, CA (Nationality), (Designated only for: US)

Legal Representative:

KIMBLE Karen L (agent), The Dow Chemical Company, Intellectual Property,  
P.O. Box 1967, Midland, MI 48641-1967, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200339483 A2-A3 20030515 (WO 0339483)  
Application: WO 2002US36028 20021108 (PCT/WO US02036028)  
Priority Application: US 2001332349 20011109

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CZ DE DK DM DZ EC  
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL  
TJ TM TN TR TT TZ UA UG US UZ YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
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Publication Language: English

Filing Language: English

Fulltext Word Count: 38857

English Abstract

Described are enzyme systems specific for acetone and methods of using  
these enzyme systems to detect acetone in biological or environmental  
samples. Biosensors containing these enzyme systems are disclosed, in  
which detection of acetone may be achieved by linking electrochemical,  
photometric, or other detection means to one or more acetone-specific  
enzyme reactions or pathways. Methods of using such acetone-specific  
biosensors include subject management of weight loss, disease detection,  
and bioavailability monitoring of therapeutics.

Fulltext Availability: Detailed Description

Detailed Description

... 9) treatment with nucleoside analogs (for example, in anti-retroviral  
therapy for HIV); I 0) **isopropanol** ingestion or ...and 12) salicylate  
intoxication. In these conditions, too, **acetone can be detected by, for  
example, breath analysis of children or adults.**

3

Thus, detection of acetone can be useful in a...

...important applications.

For example, medical reports have identified obesity as a primary risk  
factor in **diabetes**, hypertension, coronary heart disease,  
hypercholesterolemia and stroke. In many cases of obesity, a controlled  
weightSimilarly, detection of acetone can be used to alert **diabetic**  
subjects to the onset of ketoacidosis or to obtain a preliminary  
indication of the need...

16/3,AB,K/2 (Item 2 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00386084  
**OPTICAL NON-RADIOACTIVE BREATH ANALYSIS**  
**ANALYSE D'HALEINE A L'AIDE DE MOYENS OPTIQUES NON RADIOACTIFS**  
Patent Applicant/Assignee:  
BATTELLE MEMORIAL INSTITUTE,  
Inventor(s):  
TOTH James J,  
SHARPE Steven W,  
THRALL Karla D,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9726827 A1 19970731  
Application: WO 97US1126 19970124 (PCT/WO US9701126)  
Priority Application: US 96592103 19960126  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 4361  
English Abstract

The invention is a method of measuring ammonia in a **breath** sample with a room temperature, near infrared laser. The invention is particularly useful for indicating the presence and activity of an intragastrintestinal Helicobacter pylori or other ammonia compound producing metabolism.

Fulltext Availability: Detailed Description  
Detailed Description

... radioactive biomarkers in a rough vacuum with infrared light. In this patent application, the word **breath** is a vapor that includes both **exhaled** air from the lungs or perspiration vapor or sweat vapor transpired through the skin.  
BACKGROUND OF THE INVENTION  
The diagnosis of pathologies and disease by analysis of **exhaled** air has been postulated since the time of Hypocrites (ca., 400 BQ.' It is a...  
...number of pathologies are associated with the presence of distinct endogenous volatile species in the **breath** . For instance, both **diabetes** mellitus and pancreatitis, when left untreated have been associated with the production of 2,1...  
...dietary imbalance.' Then acetone can be readily detected by its characteristic sweet odor in the **breath** . Methane and hydrogen are indicative of intestinal disorders.' Hydrogen peroxide is indicative of impaired pulmonary...  
...The combination of finding several species simultaneously (i.e., acetone, **methyl ethyl** ketone and n- **propanol** ) has been statistically correlated with lung cancer in humans.' It is further known...

16/3,AB,K/3 (Item 3 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00128213  
**BREATH ALCOHOL STORAGE CONTAINER AND METHOD OF USING SAME**  
**RECIPIENT DE CONSERVATION DE L'ALCOOL DU SOUFFLE**

Patent Applicant/Assignee:

ADRIAN Werner Karl,

Inventor(s):

ADRIAN Werner Karl,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8600712 A1 19860130

Application: WO 85US1395 19850717 (PCT/WO US8501395)

Priority Application: US 84587 19840717

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT BE CH DE FR GB IT LU NL SE

Publication Language: English

Fulltext Word Count: 3616

English Abstract

An improved storage container for **alcohol** and other organic substances in **breath** samples, comprising a container with openings at opposite ends thereof, and an **alcohol**-storing compound (13) retained within the container. In the preferred embodiment, the **alcohol**-storing compound is mainly Al<sub>2</sub>O<sub>3</sub>, and seals (15) extend across the openings at each end of the container, the seals each comprising a resilient membrane (20) adapted for non-unsealing penetration by a hypodermic needle (30, 31). A moisture-sensitive compound (14) which changes color in response to the moisture in a **breath** sample is also contained in the container, for indicating when the container has been used. A waxed surface (35) is provided on the outside of the container for receiving the thumb or finger print of the individual whose **breath** is being sampled, along with means for protecting the waxed surface, whereby positive identification of the sample is achieved.

Fulltext Availability: Detailed Description

Detailed Description

... denoting **ethanol** and other substances which are to be stored, including other vapours occurring in **breath** samples, such as acetone, **methanol**, **isopropanol**, etc.. In conducting **breath** analysis, ...PCT/US85/01395 or contaminated spirits, and in acetone, which may be present in the **breath** of **diabetics** or dieters,

2\* Description of the Prior Art

**Breath alcohol** storage containers in the prior art generally either use indium bags or comprise an...

...compound held in a container, the container having openings at opposite ends to permit the **breath** sample to be flowed through it. An example is the container described in United States...

16/3,AB,K/4 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01199133

Method for analysis of expired gas

Verfahren zur Analyse von ausgeatmetem Gas

Procede d'analyse de gaz exhale

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PATENT (CC, No, Kind, Date): EP 1043581 A1 001011 (Basic)

APPLICATION (CC, No, Date): EP 660060 000329;

PRIORITY (CC, No, Date): FI 99771 990408

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): G01N-021/35; G01J-003/453

ABSTRACT EP 1043581 A1

The invention comprises a method for detecting and measuring volatile components in **expired** gas by sampling the **expired** gas containing said volatile components; passing infrared radiation from an interferometer through the sample; detecting infrared radiation transmitted from the sample to produce a signal characteristic for said volatile components in the sample; and processing said signal and a set of single component reference library spectra of pure molecular gases in order to detect and calculate the amount of said volatile components in the blood of an individual **expiring** said gas, comprising the use of a low resolution FT-IR spectrometer in said detecting and processing.

ABSTRACT WORD COUNT: 104

NOTE: Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200041	343
SPEC A	(English)	200041	4761
Total word count - document A			5104
Total word count - document B			0
Total word count - documents A + B			5104

...SPECIFICATION such as quick ambulatory use for intoxicated patients.

Definitions and preferred embodiments

Volatile components in **expired** gas can include organic solvents e.g. **methanol**, **ethanol**, **isopropanol**, acetone, toluene, various components of paints as well as methane, butane, ketones and ammonia. These compounds can appear in the **breath** when they have been consumed and/or inhaled intentionally or unintentionally, or because of a pathological **disorder** (e.g. acetone in the **breath** of patients with **diabetes** ).

Alternatively compounds to be detected and processed can involve substances intentionally administered for varying purposes...

...g. testing renal function; anesthetics can be analyzed by the method from inspired and/or **expired** gases for purposes of monitoring the anesthesia of a patient; and test compounds containing carbon...

...to study how it is metabolized to 13)CO2)), which can be analyzed from the **expired** gas since it can be differentiated from 12)CO2)) by FT-IR.

The invention will...

20/3,AB,K/6 (Item 4 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00568447

Expired gas analytical method and device.

Verfahren und Vorrichtung zur Analyse von ausgeatmetem Gas.

Procede et appareil d'analyse de gaz expire.

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PATENT (CC, No, Kind, Date): EP 574027 A2 931215 (Basic)  
EP 574027 A3 950906

APPLICATION (CC, No, Date): EP 93109614 930614;

PRIORITY (CC, No, Date): JP 92178994 920612

DESIGNATED STATES: CH; DE; FR; GB; IT; LI

INTERNATIONAL PATENT CLASS (V7): G01N-030/46; G01N-033/497;

ABSTRACT EP 574027 A2

To expedite **breath** gas analysis using gas chromatography, a sample from a patient is passed to two columns (51,52) maintained under different chromatographic conditions eg. low and high temperature. The effluent from both columns is then passed to a detector (53). In this way components such as acetone and 4-heptanone which have very different retention times on a single column, can be determined efficiently in a short time without deterioration of chromatographic resolution. The system is used in clinical analysis. (see image in original document)

ABSTRACT WORD COUNT: 87

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	288
SPEC A	(English)	EPABF1	5022
Total word count - document A			5310
Total word count - document B			0
Total word count - documents A + B			5310

...SPECIFICATION to the present invention.

Fig. 2(a) is a gas chromatogram obtained by separating an **expired** gas sample with a column for separating acetone, and Fig. 2(b) a gas chromatogram...

...acetone among the conventional three components in ketone body shows higher concentration in measurement of **expired** gas, we measured acetone as a representative component of the three components. Measurement of ketone...

...or urine takes much cost and labor while the analysis of ketone body by using **expired** gas is quite simple. Hence, measuring acetone and 4-heptanone in **expired** gas has a large significance for diagnosis of **diabetes** and as a monitor for therapy.

Fig. 2(a) shows the gas chromatogram obtained by measuring acetone and 4-heptanone in **expired** gas with using an **expired** gas analytical device (a single column: column temperature of 60(degree)C) previously developed by...

...and peak #6 **isopropanol**. Fig. 2(b) is a gas chromatogram similarly obtained by the **expired** gas analytical device with temperature of the



single column being set to 150(degree)C...

...invention has been designed to solve this problem and has a characteristic in that the **expired** gas analytical device is constructed with a multi-channel style using a plurality of columns may be preferably used for examination of various diseases in addition to **diabetes**, for example, liver cirrhosis and also for examination of newborn infants.

**Expired** gas of a patient with serious liver cirrhosis contains low-boiling ammonia (-33.4(degree)C...

...such as hyperammonemia, phenylketonuria, or **isovalericacidemia**, is examined by inspecting existence of the gases in **expired** gas of the newborn infants, a low temperature column (for ammonia) and a high temperature...

...for the remainder) may be used to carry out measurement accurately and rapidly.

Next, the **expired** gas analytical device according to the present invention developed for use in the foregoing **expired** gas examinations will be detailed. The **expired** gas analytical device generally comprises an **expired** gas **breathe**-into part, a carrier gas feeding part, a sample measuring part, a detecting part and...